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Two new species of Microcercus Budde-Lund, 1910 (Crustacea, Isopoda, Oniscoidea) from Mozambique

by

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SYNOPSIS

Two new species of terrestrial isopods of the family Eubelidae, *Microcercus stuckenbergi* and *M. gorongozae* (for *Periscyphis (Angaribia) kunenensis*: Barnard, 1960 nec Barnard, 1924), are described from Mozambique. A new diagnosis is given of *Angaribia*, elevated to a full genus, together with illustrations of the type-species *A. kunenensis* from Namibia and Angola.

INTRODUCTION

Up till now the genus *Microcercus* Budde-Lund, 1910, included with certainty 17 species (Taiti & Ferrara 1981) distributed in two separate areas of the Afrotropical region: from Senegal to Nigeria (four species) and from Ethiopia to Tanzania and northern Malawi (13 species) (Taiti & Ferrara 1981, Fig. 1).

Two new species of *Microcercus* have now been identified from central Mozambique, which represents the southernmost limit of the distribution of the genus. The specimens of the new species *M. gorongozae* were identified by Barnard (1960) as *Periscyphis (Angaribia) kunenensis* (Barnard 1924), a species distributed in southern Angola and northern Namibia. The taxon *Angaribia* Barnard, 1932, must be considered as a distinct genus (Ferrara & Taiti 1982). Since a satisfactory diagnosis of *Angaribia* does not exist, we thought it useful to provide one.

We wish to thank Drs B. Stuckenberg, J. Londt and B. Lamoral (Natal Museum, Pietermaritzburg) and Drs T. H. Barry and P. A. Hulley (South African Museum, Cape Town) for having loaned us material.

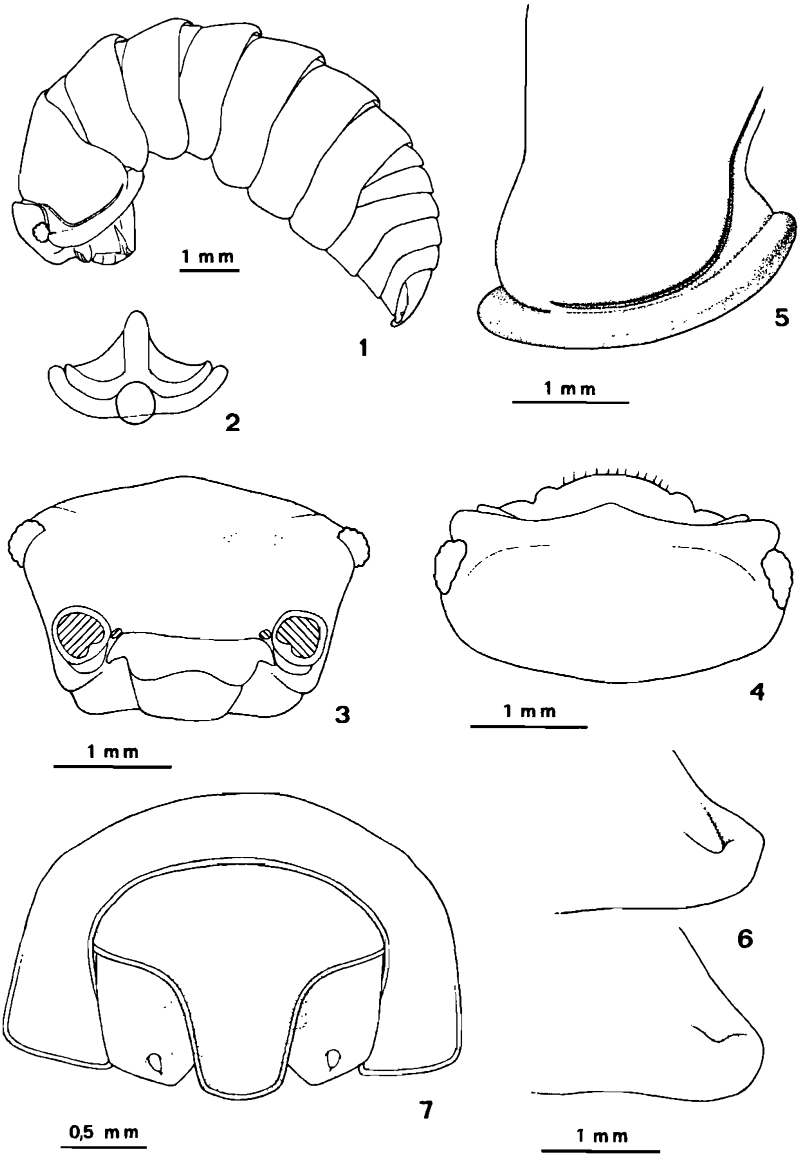
Abbreviations used throughout the text:

MF	Museo Zoologico dell'Università, Florence.
MRAC	Musée Royal de l'Afrique Centrale, Tervuren.
NM	Natal Museum, Pietermaritzburg.
SAM	South African Museum, Cape Town.

Microcercus stuckenbergi sp. n.

Derivation: The species is named for Dr B. Stuckenberg, Director of the Natal Museum, who collected these specimens.

Description: Brownish, with pale mottling; usually a dark stripe at the posterior margin of each pereon segment. Body convex, with very steep epimera (Fig. 1).



Figs 1–7. *Microcercus stuckenbergi* sp. n. 1, adult male, lateral; 2, scalespine; 3, cephalon, frontal; 4, cephalon, dorsal; 5, pereon segment 1, dorsal; 6, pereon epimera 2–3, ventral; 7, pleon segment 5, telson and uropods.

Back smooth with tiny triangular scalespines (Fig. 2). Eye with about 20 ommatidia. Cephalon (Figs 3–4): profrons triangularly produced, depressed slightly above; interocular line barely visible on sides and interrupted in middle; sidelobes largely rounded. Pereon segment 1 (Fig. 5): posterior margin slightly sinuose; lateral margin thickened and flattened externally; sulcus arcuatus deep and narrow; inner lobe of schisma rounded, protruding backwards in comparison to outer one. Pereon segments 2–3 (Fig. 6) with a transverse process on ventral surface of epimera. Pleon segment 5 with epimera convergent. Telson (Fig. 7) as long as wide; distal part trapezoidal, convex and curved inwards. Antenna (Fig. 8): fifth joint of peduncle as long as flagellum; second joint of flagellum twice as long as first, bearing some aesthetascs. Inner ramus of maxilla 1 with two penicils; outer ramus with 4 + 6 (2 cleft) teeth. Pleopods: all exopodites with pseudotracheae. Uropod: distal margin of protopodite obliquely truncated; medial part longitudinally excavated to receive lateral margin of telson; exopodite small, dorsally inserted.

Male characters: Pereopods 1–6 with a brush of spines (Fig. 9) on merus and carpus. Pereopod 7 (Fig. 10): ischium with concave sternal margin and a short posterior process; merus with sternal margin straight with sparse spines. Pleopod 1 (Figs 11–12): exopodite with a very short posterior point; endopodite with distal part bent outwards and without medial series of long spines typical of most species of this genus. Pleopod 2 (Fig. 13): endopodite much longer than exopodite.

Measurements:♂: 9,5 × 4 mm; ♀: 11 × 5 mm.

Material examined: MOZAMBIQUE: Holotype ♂, 5 ♂, 4 ♀ paratypes, summit of Machinjiri Mt., Milange (16°09'S; 35°44'E), from leaf mould, VII.1957, B. Stuckenberg and P. Usher (NMW–2587); 1 ♂, 1 ♀ paratypes, same data (MF–893).

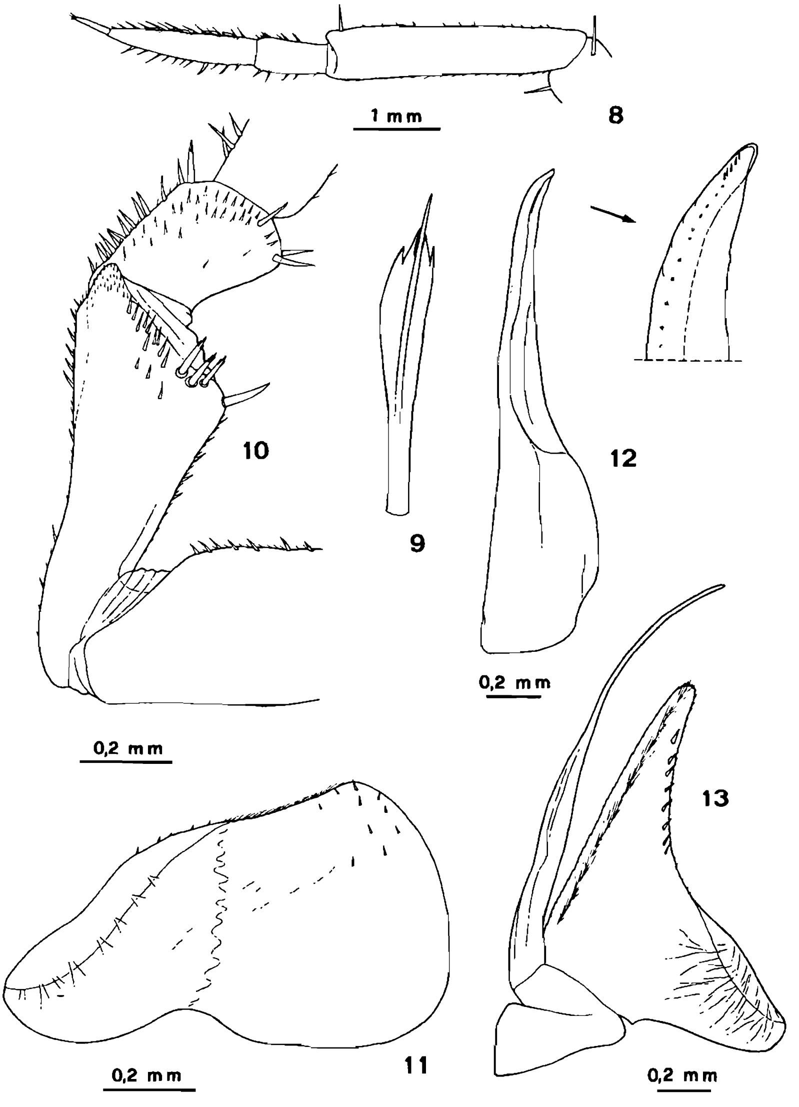
Remarks: M. stuckenbergi, together with *M. rhodesiensis* Arcangeli, 1950, from Malaŵi and *M. gorongozae* sp. n. differ from all other species of the genus by lacking both a continuous line across the head and a medial series of long spines near the apex of the male pleopod 1 endopodite. *M. stuckenbergi* differs from *M. rhodesiensis* and *M. gorongozae* in the presence of a depression on the superior part of profrons; trapezoidal instead of triangular distal part of telson; dorsal insertion of uropod exopodite and merus of the male pereopod 7 which lacks a thick brush of spines.

Microcercus gorongozae sp. n.

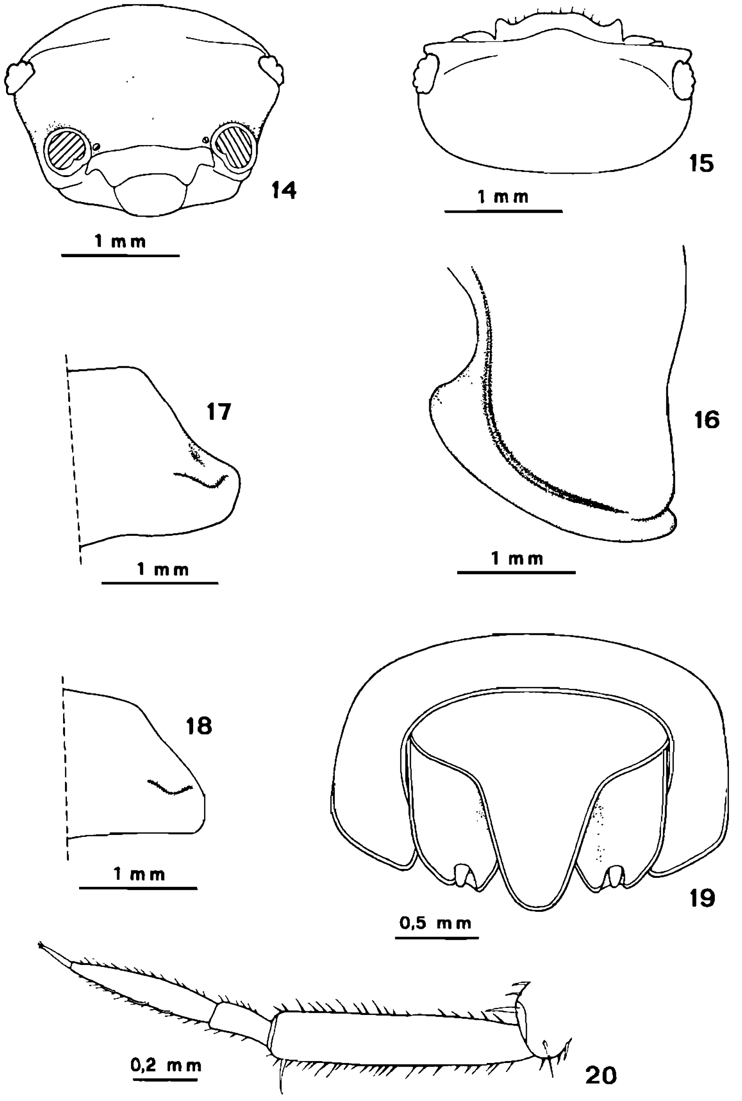
Periscyphis kunenensis: Barnard, 1960: 506.

Derivation: The specific name refers to the collecting site: Gorongoza Mountain in central Mozambique.

Description: Brown with pale mottling; pereon and pleon with three series of yellowish spots (besides usual muscle spots): one in middle of segments and two at base of epimera. Back smooth with tiny scalespines as in preceding species. Eye with about 18 ommatidia. Cephalon (Figs 14–15): profrons protruding slightly



Figs 8–13. *Microcercus stuckenbergi* sp. n. ♂. 8, antenna; 9, spine of pereopod 1 carpus; 10, pereopod 7, ischium and merus; 11, pleopod 1 exopodite; 12, pleopod 1 endopodite; 13, pleopod 2.



Figs 14–20. *Microcercus gorongozae* sp. n. 14, cephalon, frontal; 15, cephalon, dorsal; 16, pereon segment 1, dorsal; 17, pereon epimeron 2, ventral; 18, pereon epimeron 3, ventral; 19, pleon segment 5, telson and uropods; 20, antenna.

frontwards, not depressed above; interocular line clearly visible on sides and interrupted in middle; side lobes rounded. Pereon segment 1 (Fig. 16): posterior margin slightly sinuose; lateral margin thickened; sulcus arcuatus deep and narrow; inner lobe of schisma not protruding backwards. Pereon segments 2–3 (Figs 17–18) with usual transverse processes on ventral surface of epimera. Pleon segment 5 with convergent epimera. Telson (Fig. 19): distal part triangular, apex rounded. Antenna (Fig. 20): fifth joint of peduncle and flagellum subequal; second joint of flagellum about 2,5 times longer than first and bearing some aesthetascs. Exopodites of all pleopods with pseudotracheae. Uropod: posterior margin of protopodite with an incision where exopodite is inserted.

Male characters: Pereopods 1–6 with brushes of spines on merus and carpus. Pereopod 7 (Fig. 21): ischium with distal process bent slightly inwards; merus with sternal margin convex and equipped with a brush of spines. Pleopod 1 (Figs 22–23): very similar to *M. stuckenbergi*. Pleopod 2 as in Fig. 24.

Measurements: ♂: 9,5 × 3,5 mm; ♀: 11 × 4,5 mm.

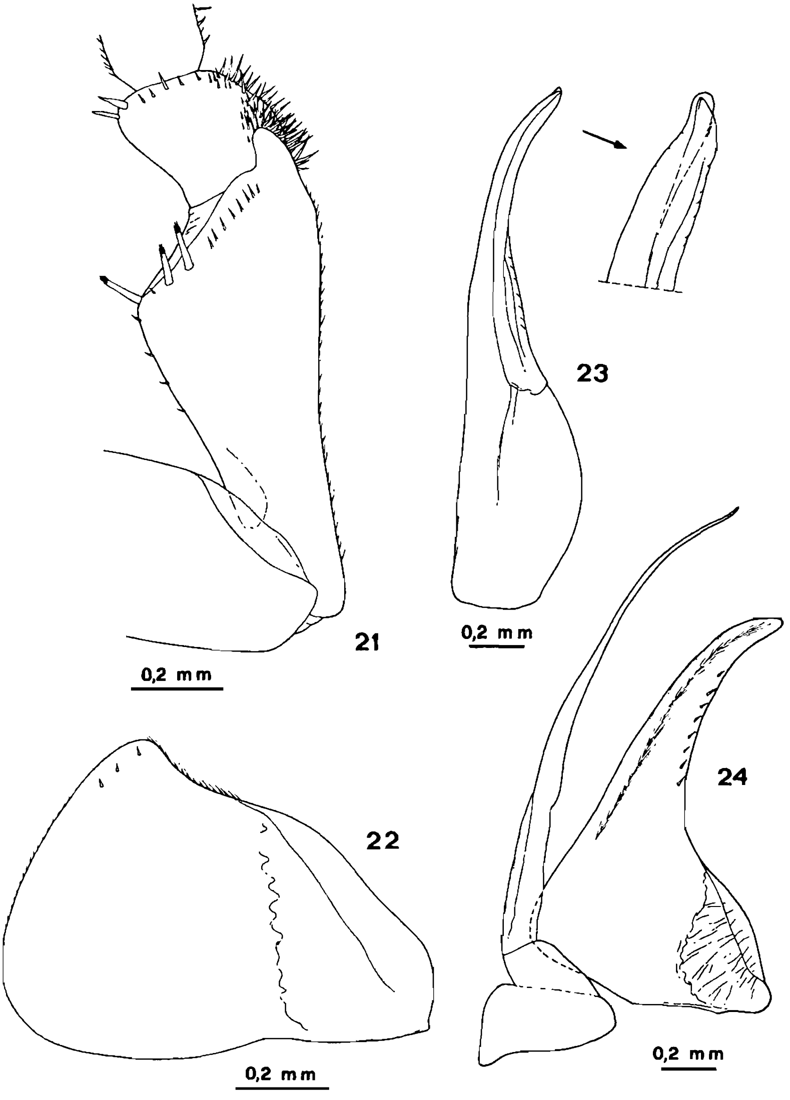
Material examined: MOZAMBIQUE: Holotype ♂, 2 ♂, 3 ♀ paratypes, Gorongoza Mt., alt. 1 200 m, IX.1957, R. F. Lawrence (NM–2588); 1 ♂, 1 ♀ paratypes, same data (MF–894).

Remarks: According to a comparison with the type material of *M. rhodesiensis* (MRAC–37956–37957), *M. gorongozae* differs from this species as follows: (i) in *M. rhodesiensis* the sulcus arcuatus on pereon segment 1 is bordered on both sides by a sharp ridge completely absent in *M. gorongozae*; the lateral thickening is externally flattened in *M. rhodesiensis* while it is regularly rounded in *M. gorongozae*; (ii) the exopodite of uropod is extremely reduced and inserted terminally in *M. rhodesiensis* while it is conspicuous and inserted more dorsally in *M. gorongozae*; (iii) the male pleopod 1 endopodite is more than five times longer than wide in *M. rhodesiensis* while it is less than four times in *M. gorongozae*.

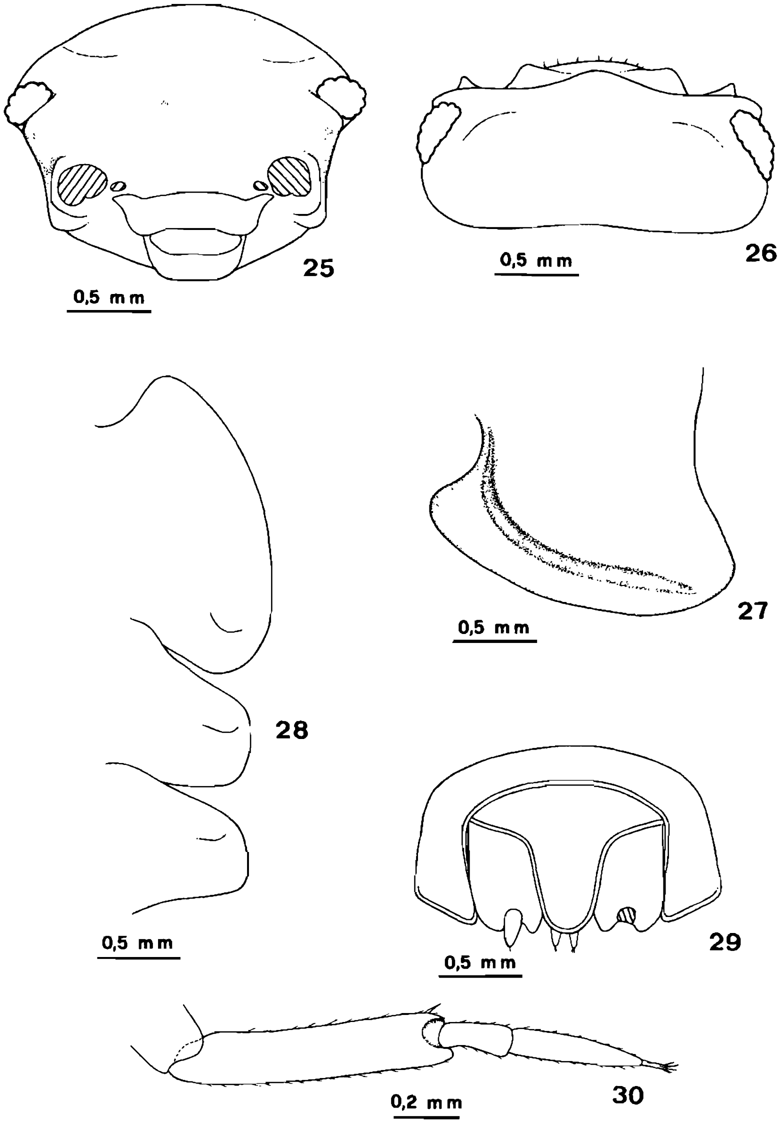
A re-examination of the material previously studied by Barnard (1960) proved that the specimens do not belong either to the species *kunenensis* or to the genus *Angaribia*, created by Barnard (1932) as a subgenus of the genus *Periscyphis*. With this correction the distribution of *Angaribia kunenensis* is very homogeneous and limited to the area along the border between Angola and Namibia since the record of Brian (1953) for Guinea-Bissau is also certainly a mistake.

As only an incomplete diagnosis of the genus *Angaribia* exists, we have given a new one together with illustrations (Figs 25–35) of the main characters of *A. kunenensis*, the only species of the genus. The following diagnosis and illustrations are based on specimens collected in Namibia at Otjinungwa on Kunene River (15 ♂, 21 ♀, 5 juv., 18.XI.1970, SAM).

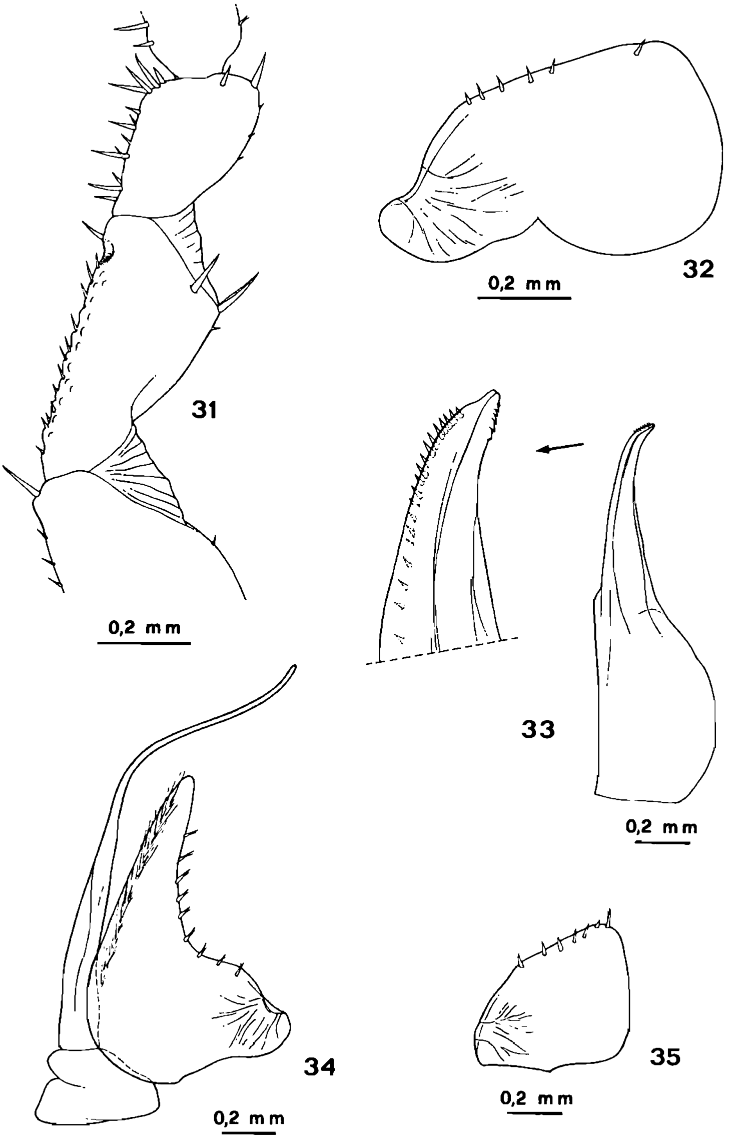
Back without ornamentation, equipped with fine setae; cephalon without frontal margin and with a tiny interocular line on sides; pereon segment 1 with lateral margin thickened, deep sulcus arcuatus, no schisma at posterior angle; epimera of pereon segments 1–3 ventrally with small endolobes; telson with triangular distal part; antennal flagellum 2-jointed; inner ramus of maxilla 1 with two penicils; five pairs of *Periscyphis*-type pseudotracheae; uropod with conspicuous exopodite inserted terminally.



Figs 21–24. *Microcercus gorongozae* sp. n. ♂. 21, pereopod 7, ischium and merus; 22, pleopod 1 exopodite; 23, pleopod 1 endopodite; 24, pleopod 2.



Figs 25–30. *Angaribia kunenensis* (Barnard, 1924). 25, cephalon, frontal; 26, cephalon, dorsal; 27, pereon segment 1, dorsal; 28, pereon epimera 1–3, ventral; 29, pleon segment 5, telson and uropods: 30, antenna.



Figs 31–35. *Angaribia kunenensis* (Barnard, 1924), ♂. 31, pereopod 7, ischium and merus; 32, pleopod 1 exopodite; 33, pleopod 1 endopodite; 34, pleopod 2; 35, pleopod 5 exopodite.

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